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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/707,097

11/20/2003

Ronald Wayne Wilson

839-1520

1096

30024

7590

01/12/2005

NIXON & VANDERHYE P.C./G.E.

1100 N. GLEBE RD.

SUITE 800

ARLINGTON, VA 22201

EXAMINER

JENKINS, JERMAINE L

ART UNIT

PAPER NUMBER

2855

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/707,097	WILSON, RONALD WAYNE	
	Examiner	Art Unit	
	Jermaine Jenkins	2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-17 is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11 is/are rejected.
- 7) ☒ Claim(s) 9 and 10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>03052004</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Beristain (5,530,029).

In regards to claim 1, Beristain teaches a pressure transducer having a sensor head (electrode 14 is being interpreted as a sensor head) including a diaphragm (24) mounted on a free end of the sensor head (14), and wherein the diaphragm (24) is constructed of a nickel-based alloy with a noble metal plating (gold being interpreted as a noble metal) on an exposed side thereof (Column 7, lines 31-42).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beristain (4,530,029).

With respect to claims 6-8, Beristain teaches the claimed invention except for the

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gold plating is applied to a thickness of about 5-8 microns, and the diaphragm has a thickness of about 42 microns.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the diaphragm and the gold plating to have different thickness of microns within any range, since it has been held that where the general conditions of a claim are disclosed in the prior art discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Therefore it would have been obvious to use any workable range of thickness due to being readily available and easy to manufacture.

3. Claims 2 & 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beristain (4,530,029) in view of "Why choose Pressure?" (Internet Article that was published on 03/12/2002).

With respect to claim 2, Beristain teaches the claimed invention except for the diaphragm is made of a C-276 nickel-based alloy. "Why choose Pressure?" teaches pressure measurement device having a diaphragm made of a C-276 nickel-based alloy (Page 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to manufacture the diaphragm into a C-276 nickel-based alloy as taught by "Why choose Pressure?" into the pressure sensing device of Beristain for the purpose of providing excellent chemical resistance properties ("Why choose Pressure?" page 3).

With respect to claim 5, Beristain and "Why choose Pressure?" teaches the claimed invention except for the noble metal plating comprises 24K gold plating.

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However, such a modification would have been held to be within the general skill of the worker in the art to select a known material on the basis of its suitability for the intended use (See MPEP 2144.04). Therefore it would have been obvious to use 24K gold plating metal due to its known conductivity and being readily available and easy to manufacture.

4. Claims 3 & 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beristain (4,530,029) in view of Hodate (5,069,759).

5. With respect to claims 3 & 11, Beristain teaches the claimed invention except for a sensor head including a threaded end portion and an integral hex nut that are comprised of the nickel-based alloy. Hodate teaches a pressure switch for a sensor having a threaded portion and an integral hex nut that are comprised of the nickel-based alloy (Column 1, lines 12-30). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a threaded portion and an integral hex nut as taught by Hodate in the pressure sensing device of Beristain for the purpose of better securing the sensor assembly to the surface of a sidewall that would improve the detecting capability of pressure difference by the diaphragm (Column 1, lines 47-52). Also, it would have been obvious to manufacture the hex nut and threaded portion to a desired material, such as a nickel-based alloy material. Such a modification would have held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use (See MPEP 2144.04). Therefore it would have been obvious to use a nickel-based alloy due to its known chemical resistant properties and being readily available and easy to manufacture.

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6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beristain (4,530,029) and Hodate (5,069,759) as applied to claim 3 above, and further in view of “Why choose Pressure?” (20020312).

With respect to claim 4, Beristain and Hodate teach the claimed invention except for the diaphragm is made of a C-276 nickel-based alloy. “Why choose Pressure?” teaches pressure measurement device having a diaphragm made of a C-276 nickel-based alloy. It would have been obvious to one of ordinary skill in the art at the time the invention was made to manufacture the diaphragm into a C-276 nickel-based alloy as taught by “Why choose Pressure?” into the pressure sensing device of Beristain and Hodate for the purpose of providing excellent chemical resistance properties (“Why choose Pressure?” page 3).

Allowable Subject Matter

7. Claims 12-17 are allowed.

8. The following is an examiner’s statement of reasons for allowance: The prior art does not disclose or suggest a method of monitoring line pressure in a reciprocating hydrogen compressor in a sour gas environment providing a pressure transducer having a sensor head and a diaphragm located flush with a free end of the sensor head composed of a nickel-based alloy; applying gold plating to one side of the diaphragm, and mounting the pressure transducer in a reciprocating compressor with the one side exposed to the sour gas.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermaine Jenkins whose telephone number is 571-272-2179. The examiner can normally be reached on Monday-Friday 8am-430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jermaine Jenkins
A.U. 2855


EDWARD LEFKOWITZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800